

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-9. (Canceled)

10. (Currently Amended) A method for producing a single crystal by Czochralski method by pulling a seed crystal from a raw material melt, comprising:

immersing ~~a seed~~ the seed crystal into ~~a raw~~ the raw material melt; and
growing ~~a single~~ the single crystal by rotating and pulling the seed crystal,

wherein:

the single crystal is pulled ~~with controlling~~ while controlling a value of V/G ($\text{mm}^2/\text{K} \cdot \text{min}$) within a ~~determined~~ range of values of V/G ($\text{mm}^2/\text{K} \cdot \text{min}$); and

the range of ~~a value~~ values of V/G ($\text{mm}^2/\text{K} \cdot \text{min}$), including a ~~desired~~ defect region and/or a ~~desired~~ defect-free region, is ~~determined~~ controlled according to T_{max} ($^{\circ}\text{C}$);

wherein:

V (mm/min) is ~~the single~~ a single crystal pulling rate of pulling ~~a single~~ the single crystal;

G (K/mm) is a temperature gradient at a solid-liquid interface, in a range of a melting point of the raw material and 1400°C ;

T_{max} ($^{\circ}\text{C}$) is ~~the highest~~ a highest temperature of the raw material melt at an interface between a quartz crucible inner wall and ~~a raw~~ the raw material melt; and

the range of ~~a value~~ values of V/G ($\text{mm}^2/\text{K} \cdot \text{min}$) is selected from ~~a~~ the group consisting of:

from $-0.000724 [\text{mm}^2/(^{\circ}\text{C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (^{\circ}\text{C}) + 1.31$
($\text{mm}^2/\text{K} \cdot \text{min}$) to less than $-0.000724 [\text{mm}^2/(^{\circ}\text{C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (^{\circ}\text{C}) + 1.38$
($\text{mm}^2/\text{K} \cdot \text{min}$);

$$-0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.38$$

($\text{mm}^2/\text{K} \cdot \text{min}$) or more; and

$$\text{from } -0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.31$$

($\text{mm}^2/\text{K} \cdot \text{min}$) to $-0.000724 [\text{mm}^2/(\text{°C} \cdot \text{K} \cdot \text{min})] \times T_{\text{max}} (\text{°C}) + 1.35 (\text{mm}^2/\text{K} \cdot \text{min})$.

11-13. (Canceled)

14. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein the single crystal is pulled with the $T_{\text{max}} (\text{°C})$ being in a range of 1560 °C or less.

15-17. (Canceled)

18. (Previously Presented) The method for producing a single crystal according to Claim 10, wherein, at least, the $T_{\text{max}} (\text{°C})$ is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

19-21. (Canceled)

22. (Previously Presented) The method for producing a single crystal according to Claim 14, wherein, at least, the $T_{\text{max}} (\text{°C})$ is changed by providing a heat insulating material between the crucible containing the raw material melt and a heater provided so as to surround the crucible, or by providing a heat insulating material below the crucible.

23-25. (Canceled)

26. (Currently Amended) The method of producing a single crystal according to Claim 10, wherein ~~a silicon single crystal is pulled as the single crystal~~ crystal that is pulled is a silicon single crystal.

27. (Currently Amended) The method of producing a single crystal according to Claim 10, wherein ~~a single~~ the single crystal with that is pulled has a diameter of 200mm or ~~more is pulled as the single crystal.~~ more.

28. (Canceled)